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Submitted by:

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Atty. Docket No.
DP-309380Serial No.
10/623,941Applicant
MICHAEL RALPH FOSTERFiling Date
July 21, 2003Group
3748

U.S. PATENT DOCUMENTS

Exam. Init.	Document Number	Date	Name	Class	Sub Class	Filing Date (if approp.)
DT	6,637,413	10/28/2003	Maloney, et al.			
	6,600,989	07/29/2003	Sellnau, et al.			
	6,588,409	07/08/2003	Maloney, et al.			
DT	6,560,526	05/06/2003	Matekunas, et al.			

FOREIGN PATENT DOCUMENTS

Document Number	Date	Country	Class	Subclass	Translation Yes No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Examiner

Brennan

Date Considered

8/11/04

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Name: Lindsey Dickerson

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U.S. PATENT DOCUMENTS

Exam. Init.	Document Number	Date	Name	Class	Sub Class	Filing Date (if approp.)
DT	1,260,724	03/26/1918	W. B. Slaughter, Jr. & R. A. Gaertner			10/30/1916
	3,091,741	05/28/63	L. C. Eisaman et al.	331	183	04/18/1957
	3,752,138	08/14/1973	Gaines	123	139R	08/09/1971
	3,976,042	08/24/1976	Baguelin	123	139AR	10/08/1974
	4,006,722	02/08/1977	Hata et al.	123	124A	01/31/1975
	4,036,014	07/19/1977	Ariga	60	274	10/10/1975
	4,129,109	12/12/1978	Matsumoto	123	198F	08/11/1977
	4,134,261	01/16/1979	Iizuka et al.	60	276	08/15/1977
	4,143,635	03/13/1979	Iizuka et al.	123	198F	12/06/1977
DT	4,184,470	01/22/1980	Iizuka	123	198F	04/13/1978

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclass	Translation Yes No
DT	JP58-140432	20-08-1983	Japan	F02D17	02	No
DT	EP0846221B1	03-11-1999	PCT	F02D17	02	Yes
DT	EP0919702A2	02-06-1999	PCT	F01N3	20	No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

DT | International Search Report for PCT/US02/37775, April 9, 2003, pages I & II

DT | International Search Report for PCT/US02/37813, April 4, 2003, pages I & II

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Exam. Init.	Document Number	Date	Name	Class	Sub Class	Filing Date (if approp.)
DT	4,207,856	07/17/1980	Sugasawa et al.	123	198F	07/06/1978
	4,303,053	12/01/1981	Etoh et al.	123	568	05/02/1980
	4,305,249	12/15/1981	Schmid et al.	60	274	11/02/1979
	4,344,393	08/17/1982	Etoh et al.	123	198F	06/20/1980
	4,391,095	07/05/1983	Virk	60	286	07/02/1981
	4,391,240	07/05/1983	Sugasawa et al.	123	198F	03/26/1980
	4,395,875	08/02/1983	Virk	60	274	07/24/1981
	4,404,796	09/20/1983	Wade	60	274	06/03/1982
	4,436,060	03/13/1984	Tanaka et al.	123	41.1	01/28/1981
	4,450,801	05/29/1984	Thedens et al.	123	198F	11/16/1981
	4,459,952	07/17/1984	Holstein	123	198F	07/28/1982
DT	4,484,548	11/27/1984	Sugasawa et al.	123	198F	11/12/1980

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclass	Translation Yes No
DT	EP0919702A3	16-08-2001	Germany	F01N3	20	No
DT	WO9708441	05-08-1996	PCT	F02D17	02	Yes

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

DT | Clean Diesel III, Southwest Research Institute, January 2001, pages 1-80 inc. attachments

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Exam. Init.	Document Number	Date	Name	Class	Sub Class	Filing Date (if approp.)
DT	4,550,704	11/05/1985	Barho et al.	123	481	03/19/1984
	4,572,148	02/25/1986	Deutschmann et al.	123	559	07/11/1984
	4,640,241	02/03/1987	Matsunaga	123	198F	05/29/1985
	4,671,226	06/09/1987	van Rinsum	123	179F	01/04/1982
	4,860,716	08/29/1989	Deutschmann	123	560	05/03/1988
	4,930,455	06/05/1990	Creed et al.	123	41.1	10/14/1988
	4,936,273	06/26/1990	Myers	123	321	04/28/1989
	4,976,228	12/11/1990	Kawamura	123	90.11	10/13/1989
	5,042,444	08/27/1991	Hayes et al.	123	339	05/07/1990
	5,043,894	08/27/1991	Yamaguchi	364	424.1	07/05/1989
	5,088,460	02/18/1992	Echeverria	123	322	09/01/1989
DT	5,099,816	03/31/1992	Ohga et al.	123	481	08/24/1990

FOREIGN PATENT DOCUMENTS

Document Number	Date	Country	Class	Subclass	Translation Yes No
DT WO03/048533A1	12-06-2003	PCT	F01N3	00	Yes

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Examiner *Premkumar* Date Considered

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U.S. PATENT DOCUMENTS

Exam. Init.	Document Number	Date	Name	Class	Sub Class	Filing Date (if approp.)
DT	5,101,801	04/07/1992	Schatz	123	556	03/28/1991
	5,117,790	06/02/1992	Clarke et al.	123	321	02/19/1991
	5,138,992	08/18/1992	Krieger	123	198F	01/15/1992
	5,190,013	03/02/1993	Dozier	123	481	01/10/1992
	5,195,485	03/23/1993	Jensen et al.	123	198F	04/21/1992
	5,249,130	09/28/1993	Mamiya et al.	364	431.05	09/20/1991
	5,407,130	04/18/1995	Uyeki et al.	237	12.3B	07/20/1993
	5,433,182	07/18/1995	Augustin et al.	123	456	10/13/1994
	5,483,941	01/16/1996	Cullen et al.	123	481	10/25/1993
	5,492,100	02/20/1996	Ishii et al.	123	481	09/15/1994
	5,549,093	08/27/1996	Imamura	123	481	12/28/1994
	5,555,871	09/17/1996	Gopp et al.	123	481	05/08/1995
DT	5,647,207	07/15/1997	Grotjahn et al.	60	300	06/19/1995

FOREIGN PATENT DOCUMENTS

Document Number	Date	Country	Class	Subclass	Translation Yes No
DT WO03/048548A1	12-06-2003	PCT	F02D17	02	Yes

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Examiner Brennan | Date Considered

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Exam. Init.	Document Number	Date	Name	Class	Sub Class	Filing Date (if approp.)
DT	5,655,365	08/12/1997	Worth et al.	60	285	06/06/1995
	5,695,430	12/09/1997	Moyer	477	189	01/29/1996
	5,720,260	02/24/1998	Meyer et al.	123	436	12/13/1996
	5,769,054	06/23/1998	Schnaibel et al.	123	437	02/26/1996
	5,802,846	09/08/1998	Bailey	60	278	03/31/1997
	5,813,383	09/29/1998	Cummings	123	198F	09/04/1996
	5,826,563	10/27/1998	Patel et al.	123	481	07/28/1997
	5,867,982	02/09/1999	Tengblad et al.	60	274	06/02/1995
	5,875,743	03/02/1999	Dickey	123	25C	07/28/1997
	5,930,992	08/03/1999	Esch et al.	60	274	10/18/1996
✓	5,894,726	04/20/1999	Monnier	60	274	10/27/1997
DT	5,934,263	08/10/1999	Russ et al.	123	698	07/09/1997

FOREIGN PATENT DOCUMENTS

Document Number	Date	Country	Class	Subclass	Translation Yes No

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Examiner *Berntran* | Date Considered

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U.S. PATENT DOCUMENTS

Exam. Init.	Document Number	Date	Name	Class	Sub Class	Filing Date (if approp.)
DT	5,979,394	11/09/1999	Schmidt	123	198F	05/21/1998
	6,009,857	01/04/2000	Hasler et al.	123	481	05/29/1997
	6,023,929	02/15/2000	Ma	60	295	08/25/1998
	6,032,869	03/07/2000	Ito et al.	237	12.3B	04/02/1997
	6,032,929	03/07/2000	Vatne	254	385	06/22/1998
	6,164,065	12/26/2000	Denari et al.	60	284	11/12/1999
	US6,178,371B1	01/23/2001	Light et al.	701	93	04/12/1999
	US6,209,526B1	04/03/2001	Sun et al.	123	481	10/18/1999
	US6,220,233B1	04/24/2001	Pierpont	123	568.12	10/13/1999
	US6,237,330B1	05/29/2001	Takahashi et al.	60	285	04/13/1999
	US6,244,242B1	06/12/2001	Grizzle et al.	123	295	10/18/1999
DT	US6,244,258B1	06/12/2001	Akiyama et al.	123	568.21	12/01/1999

FOREIGN PATENT DOCUMENTS

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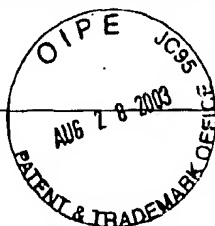
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DT	US6,305,344B1	10/23/2001	Perry	123	198F	10/03/2000
	US6,336,071B2	01/01/2002	Grizzle et al.	701	115	04/02/2001
	US6,354,266B1	03/12/2002	Cornell et al.	123	322	12/20/2000
	US6,360,713B1	03/26/2002	Kolmanovsky et al.	123	295	12/05/2000
	US6,367,443B1	04/09/2002	Bassi et al.	123	198F	03/22/2000
	US6,382,193B1	05/07/2002	Boyer et a.	123	560	11/20/2000
	US6,408,618B2	06/25/2002	Ide	60	285	02/01/2001
	US6,467,257B1	10/22/2002	Khair et al.	60	278	06/19/2001
	US6,543,398B1	04/08/2003	Roberts, Jr. et al.	123	58.8	07/19/2001
	US6,557,520B2	05/06/2003	Roberts, Jr.	123	276	08/30/2001
	US2001/0002379A1	05/31/2001	Schechter	477	115	01/12/2001
DT	US2001/0002538A1	06/07/2001	Katsuta et al.	60	284	12/06/2000

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DT	US2001/0050070A1	12/13/2001	Xu et al.	123	295	06/11/2001
	US2002/0020169A1	02/21/2002	Ketcher	60	285	08/21/2001
	US2002/0059915A1	05/23/2002	Houston et al.	123	305	10/05/2001
	US2003/0041836A1	03/06/2003	Roberts, JR.	123	276	08/30/2001
	US2003/0066507A1	04/10/2003	Roberts, JR.	123	256	10/10/2001
	US2003/0074893A1	04/24/2003	Webb et al.	60	285	10/11/2002
↓	US2003/0101961A1	06/05/2003	Foster	123	198F	11/25/2002
DT	US2003/0121249A1	07/03/2003	Foster et al.	60	285	11/25/2002

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